



Design for the Environment

Garment and Textile Care Program Fact Sheet



What is Design for the Environment?

EPA's Design for the Environment (DfE) Program is a voluntary initiative that forges partnerships with various stakeholder groups in an effort to:

- Incorporate environmental concerns into the traditional decision-making parameters of the business world: 'cost' and 'performance.'
- Build incentives for behavior change to encourage continuous environmental improvement.

To accomplish these goals, the program utilizes EPA expertise and leadership to compare the relative environmental and human health risks, performance, and cost tradeoffs of traditional and alternative technologies. DfE disseminates information on its work to all interested parties and also assists businesses to implement the new technologies identified through the program.

The program currently has cooperative partnerships with:

- Industry
- Academia
- Environmental and Public Interest Groups
- Labor Unions
- Research Organizations
- Government purchasing agencies
- Professional Institutions and Trade Associations

Cleaner Clothes, Cleaner Neighborhoods, And Cleaner Solutions



Why Is EPA Working With Garment Care Professionals?

Since 1992, EPA has worked in partnership with the drycleaning industry as part of EPA's Design for the Environment Program. With more than 30,000 commercial shops in neighborhoods and malls across the country, drycleaners are one of the largest group of chemical users that come into direct contact with the public. Because of the potential health and environmental concerns associated with perchloroethylene, or "perc," a chemical solvent used by most drycleaners, EPA and stakeholders from the drycleaning industry and public interest groups, have been working together to evaluate other cleaning process controls and technologies.

How Did the DfE Garment and Textile Care Program Get Started?

The DfE Garment and Textile Care Program (GTCP) was initiated after a 1992 international roundtable on drycleaning in which industry leaders and EPA agreed that health and environmental issues surrounding the drycleaning industry could be addressed most effectively through the Design for the Environment's voluntary, proactive approach. Hence, the project partnership was established to encourage the development and incorporation of environmentally-preferable cleaning methods which professional cleaners can offer to their customers, while maintaining or increasing economic viability. Initial efforts focused on the development and evaluation of new cleaning methods, the development of training materials, and the publication of information. In 1996, at the DfE Apparel Care Conference, it was recognized that decisions made in related industries affect the cleanability of garments, and ultimately the decisions made by drycleaners. EPA organized a follow-on conference, which was held in early 1998, to expand the partnership to include representatives from industries such as garment and textile designers, manufacturers, fiber producers, retailers, and consumers. The primary goal of the expanded partnership is to explore how decisions made by other industries, such as textile manufacturers, affect the incorporation of environmentally-preferable methods into professional cleaning operations. These issues have resulted in the GTCP incorporating a life cycle approach, including the identification of upstream industrial decisions and trends that impact garment care process choices.

What Is EPA Doing About Garment Care Today?

The GTCP continues to work with partners on gathering, generating, and analyzing technical data; promoting the implementation of cleaner technologies information through education and assistance; and communicating project information through outreach activities. The GTCP encourages new technologies coming online, and is also exploring related industries that might provide opportunities to expand on the successes of the drycleaning industry partnership.

- **Technical Studies**

Working with the industry, EPA published the *Cleaner Technologies Substitutes Assessment for Professional Fabricare Processes* (CTSA) in September 1998, which is a technical report that presents relative cost, risk, and performance information on existing and new cleaning technologies and substitute solvents. The goal of the CTSA is to create a comparative assessment of clothes cleaning technologies in order to provide drycleaners with information they can use to make informed technology choices that incorporate environmental concerns along with the usual parameters of cost and performance. The CTSA is part of an effort to assist cleaners who might have limited time or resources to collect the information themselves. EPA has produced informational documents for industry and the general public to promote cost-effective, environmentally sound choices. Several fact sheets and case studies on emerging technologies are in preparation.

- **Implementation Efforts**

EPA is supporting a project with North Carolina State University College of Textiles to develop a methodology for evaluating the effectiveness of various existing and new cleaning technologies on typical fabrics and soils. The study includes perc, petroleum solvent and water-based cleaning processes, and hopes to add a liquid carbon dioxide system.

EPA is also supporting a life cycle analysis project with NCSU College of Engineering. The project seeks to work with various industrial partners to build a garment care life cycle tool.

In 1997, the GTCP designed an outstanding training course to teach garment care professionals and staff about wetcleaning. Developed through an EPA grant with the Toxics Use Reduction Institute at the University of Massachusetts, the curriculum explains how wetcleaning works and how to operate a wetcleaning facility. The course also explains how to convert from drycleaning to a wetcleaning facility.

- **Outreach Activities**

The GTCP has a number of ongoing outreach activities including wetcleaning seminars across the U.S. Now that a liquid carbon dioxide process is commercially available in this country, the GTCP will expand its outreach activities to include information on this brand new garment care technology, and others as they come online. The GTCP and its project partners have created a variety of informational materials, most of which are available in hardcopy or on the GTCP web site. The GTCP is currently preparing a number of auxiliary documents to make the highly technical fabricare CTSA more accessible to non-technical audiences, including a much shorter summary version of the CTSA (due out shortly), as well as the plain English *Frequently Asked Questions about Drycleaning* and the *CTSA Fact Sheet*. The GTCP has begun drafting several case studies to elaborate on specific aspects of alternative professional garment cleaning technologies.

How Does the GTCP Affect Garment Care Professionals?

By joining EPA in its commitment to safer, cleaner technologies, drycleaners can maintain a competitive edge in the marketplace. With an en-

hanced awareness of available technological options, drycleaners can improve their operations and bottom line, while contributing to a cleaner environment and safer workplace. As consumers increasingly opt for "green," environmentally sound products and services, drycleaners that consider the health and environmental impacts of their business decisions are more likely to sustain solid support from both their customers and neighbors. Educating the public about various cleaning technologies, and their own efforts toward environmental protection, is a job professional cleaners can embrace.

How Does the GTCP Affect Consumers?

Like businesspeople, consumers also benefit from understanding how their everyday choices affect the environment.

Consumers today face an ever-widening array of products and services from which to choose. As people better understand how a product's design and manufacturing process affects the environment, they will be able to make responsible decisions that benefit them, their families, and their community.



How Can I Get More Information?

Contact EPA's Pollution Prevention Information Center to receive an information packet about EPA's DfE Program or the Garment and Textile Care Program, or to request single copies of DfE documents. A revised DfE Publications List along with these recent GTCP publications are now available:

CTSA for Professional Fabricare Processes
(EPA 744-B-98-001)

CTSA: Summary (EPA 744-S-98-001)

CTSA Fact Sheet (EPA 744-F-98-011)

Frequently Asked Questions about Drycleaning
(EPA 744-K-98-002)

Garment and Textile Care Resource Guide
(EPA 744-K-98-005)

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